

Title of the project: The comparison of the efficiency of colon capsule endoscopy and optical colonoscopy in patients with positive immunochemical faecal occult blood test

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Summary of 2017 results

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Czech Republic is among the countries with the highest incidence and mortality of colorectal carcinoma (CRC) in the world. In 2000, the National CRC screening program was started, focusing on individuals at average CRC risk older than 50 years. The program is based on the immunochemical faecal occult blood tests (FIT) and/or colonoscopy. The main problems are limited coverage of the target population (fear of colonoscopy procedure) and colonoscopy capacity. The solution can be based on modern minimally invasive test (colon capsule endoscopy - CCE) incorporated into the program as filter between the FIT and colonoscopy or as alternative for individuals unwilling or unable to undergo the usual program procedures. The aim of our project is to demonstrate that the negative predictive value of the CCE applied in patients with positive result of FIT is sufficient (> 85 %) to safely spare the patients the optical colonoscopy examination. 230 individuals with average colorectal cancer risk (asymptomatic, aged 50 – 75 years, with negative personal medical history of CRC and adenomas and negative family history of CRC) will be included. All individuals will be invited to the study after the positive semiquantitative FIT performed within the regular National CRC screening program. All patients will have CCE afterwards, followed by optical colonoscopy. We investigated first cohort of 16 patients (in our centre) without any complications during 2017. We identified multiple premalignant lesions and one CRC. All adenomas diagnosed during the study were endoscopically resected and patients were scheduled for follow-up colonoscopy.

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